**KENNEDY KWEKU AKOGO**

[akogokennedy@gmail.com](mailto:akogokennedy@gmail.com) | Accra, Ghana | https://github.com/kennedy-ak | <https://www.linkedin.com/in/kennedy-akogo-348429227/>

**RESEARCH INTERESTS**

1. Machine Learning in Robotics

2. Artificial Intelligence for Societal Impact

3. Software Engineering

4. Internet of Things in Agriculture

# **EDUCATION**

**University of Mines and Technology (UMaT), Ghana**

BSc. Computer Science and Engineering, **Second Class Upper Honors (76.7% out of 100%)**

**Relevant courses:** Data Structures and Algorithm, Software Engineering, Embedded Systems, Report Writing, Database Management System, Operating System, Information Security, Simulation and Modelling, Microprocessors, Digital Hardware Design, Human Computer Interaction (HCI).

**PROJECTS**

**Medical Chatbot with LLM Fine-tuning & RAG May 2024 – Sept 2024**

* Developed a medical chatbot using a hybrid approach of fine-tuning lightweight open-source models and integrating RAG with medical literature.
* Built a Streamlit UI for interactive user engagement and improved patient experience.
* Optimized the model using LoRA to reduce computational costs while maintaining accuracy.

**Heart Disease Data Visualization with Dash May 2024 – Sept 2024**

* Designed a responsive dashboard to visualize heart disease trends, risk factors, and geographic distribution
* Implemented choropleth maps, time-series analysis, and correlation heatmaps for data-driven insights.

**Local Language Translation App for Ghanaian Languages (Capstone Project) May 2024 – Sept 2024**

* Developed a language translation app to bridge communication gaps in

Ghanaian local languages, promoting inclusion and accessibility **Accra, Ghana**

* Integrated features such as **text translation**, **audio-to-text conversion**, and **text-to-speech output** for seamless user interaction.

**Farmlynco Mobile App to link local farmers to consumers directly July 2024 - Oct 2024**

* Created an online marketplace connecting farmers with suppliers and buyers. **Addis, Ethiopia**
* Led the integration of IoT weather station for providing farmers with accurate

weather forecasts.

* Developed AI-driven "Crop Doctor" for diagnosing and managing crop diseases.

**Drowsiness and Alcohol Detection system with a revenue generation model.**  **Feb 2022 – Apr 2022**

**Tarkwa, Ghana**

* Implemented real-time drowsiness detection using facial landmarks.
* Integrated an MQ3 sensor for alcohol detection with alert mechanisms
* Designed a fine-based revenue model linked to detection result

**PROFESSIONAL EXPERIENCE**

**Really Great Tech – AI/ML Engineer Oct 2024 - Present**

 Engineered scalable machine learning pipelines for data preprocessing,

model training, and deployment. **Accra Ghana**

* Conducted data analysis and feature engineering to improve model accuracy and reliability.
* Collaborated with cross-functional teams to integrate AI solutions into production systems.
* Fine-tuned LLMs for domain-specific tasks, integrating RAG with external knowledge sources.
* Implemented and optimized MLOps pipelines for seamless deployment and monitoring of AI models.
* Spearheaded the adoption of Langfuse for AI observability and performance monitoring.

**Web Developer | The African Institution for Mining Professionals and Practitioners *(Present)***

* Built and maintained scalable web applications to enhance mining industry digitalization.
* Integrated AI-driven analytics to improve decision-making and operational efficiency.

**University of Mines and Technology - Tarkwa, Western Oct - Dec 2022**

**Networking Intern Tarkwa, Ghana**

* Gained hands-on experience in network administration and maintenance.
* Assisted in troubleshooting and resolving network issues, contributing to improved

network reliability.

**The African Institution for Mining Professionals and Practitioners – Web Developer Jan-Oct 2024**

* Designed, developed, and maintained dynamic and

user-friendly websites to support the institution's mission and goals.  **Accra, Ghana**

* Monitored and resolved website issues to ensure seamless user experiences.

**SKILLS & EXPERTISE**

* **Machine Learning & Deep Learning:** PyTorch, TensorFlow, Scikit-learn, FastAPI, Hugging Face
* **Large Language Models (LLMs):** Fine-tuning, RAG, LangChain, Transformers, LoRA, PEFT
* **Django Backend Developer**
* **Programming languages:** JAVA, PHP, Python.
* **Engineering Tools and Software:** Arduino, Raspberry Pi, Visual Studio, Latex,

ENSP Network Simulator, Wireshark, Proteus, Fritzing.

**HONORS AND AWARDS**

* Participated in IndabaX Data Science Summit at KNUST **Jul 2024**
* Participated in Google Global Challenge **Jan 2023**
* Participated at the Tech in Ghana Conference by representing UMaT **May 2022**

**CERTIFICATIONS**

* Introduction to Cyber Security Tools and Cyber Attack, Coursera **Jan 2024**

**VOLUNTEERING EXPERIENCE AND CO-CURRICULAR ACTIVITIES**

**Firm Health Ghana Foundation September,2024**

* Served as a graphic designer and designed all the flyers for the blood donation exercise.
* Collected personal data of the people during the blood donation exercise.

**Agri-IoT August,2023**

* Contributed to the Agri-IoT project by implementing Arduino concepts, promoting

innovation in agricultural technology as a volunteer.

**Festive Kids Boot Camp September,2023**

* Trained 300 pupils from the Cape Coast Municipality in robotics and programming,

fostering STEM education and digital literacy within the community.

**A Football Goalkeeper in the community team**

**LEADERSHIP EXPERIENCE**

**President of the Association of Computer Science and Engineering Students- UMaT Sept 2023 - 2024**

* Created a Mentorship Program where Senior Members mentor and provide guidance and to newer or less experienced members.

**Artificial Intelligence Head, Aaenics UMaT Robotics Club Jan 2023 - 2024**

* Developed and implemented strategies to help members integrate Artificial Intelligence with Robotics

**PUBLICATIONS**

Emmanuel Effah1, Mohammed Yussif Umaru, Dodoo Frances Naa Densua, Ghartey George , **Akogo Kennedy Kweku, “***Smart Road Accident Prevention System for Revenue Generation in Ghana*”, *International Journal of Computer Science and Information Security (IJCSIS), June 2023*